CLMPTO

June 03, 2005

AS

1. (AMENDED) A digital video reception device, [characterized in that it comprises] comprising:

- means of reception [(101, 102, 103)] and of demultiplexing [(113)] of audio and video packets from a multiplexed digital stream;
- a first video writing memory [(205a)] for accumulating a predetermined quantity of demultiplexed video packets;
- a second audio writing memory [(205b)] for accumulating demultiplexed audio packets;
- means of storage [(201)] of the multiplexed audio and video packets in the form of blocks, each block comprising a first area for recording the video packets and of fixed size equal to said predetermined quantity, and a second area for recording for audio packets and of fixed size such that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining the predetermined quantity of video data.

2. (AMENDED) The device as claimed in claim 1, [characterized in that] wherein said means of storage [(201)] further comprises a first partition for a mainly random access and implementing multiple indirect addressing, and a second partition reserved for audio and video stream recording for a mainly sequential access and implementing simple indirect addressing.

3. (AMENDED) The device as claimed in claim 2, [characterized in that] wherein the size of a block of the second partition is larger by at least an order of magnitude than the size of a block of the first partition.

4. (AMENDED) The device as claimed in [one of claims 1 to 3] claim 1, [characterized in that] wherein the means of storage [(201)] comprise a recordable disk.

5. (AMENDED) The device as claimed in [one of claims 1 to 4] claim 1, [characterized in that] wherein it comprises a third [video reading] memory [(206a)] for reading video data from the storage means [(201)] and a fourth [audio reading] memory [(206b)] for the reading of audio data, the respective sizes of the third and fourth memories, video and audio reading respectively, being equal to the sizes of the first and second memories, video and audio writing respectively.

6. (AMENDED) The device as claimed in [one of claims 1 to 5] claim 1, [characterized in that it comprises] further comprising:

- a writing memory [(205)] for transmitting data to the storage means, which memory is organized as an area [(205a)] comprising N video writing memories of FIFO type and an audio writing area [(205b)] comprising a memory of FIFO type having the size of N audio writing memories;
- means [(107)] for controlling the transfer of video data to a first of the N video writing memories and of audio data to the audio writing area, the transfer of video data being continued to a next video writing memory when said first of the N video writing memories is full;
- means [(207)] for storing the location, in the area for recording audio data, of the audio data corresponding to each of the N video writing memories.

7. (AMENDED) The device as claimed in claim 6, [characterized in that it furthermore comprises] further comprising means [(107)] for initiating the transfer of video and audio data stored in said writing memory to the storage means [(201)] as soon as one of the N video writing memories has been filled.

8. The device as claimed in claim 5, [combined with one of claims 1 to 4, 5 or 6, characterized in that it comprises] further comprising:

- a reading memory [(206)] for receiving data from storage means, which memory is organized as an area [(206a)] comprising N video reading memories of FIFO type and an audio reading area [(206b)] comprising a memory of FIFO type having the size of N audio reading memories;
- means [(107)] for controlling the transfer of video data to a first of the N video reading memories and of audio data to the audio reading area, the

transfer of video data being continued to a next video reading memory when said first of the N video reading memories is full;

- means [(207)] for storing the location, in the area for reading audio data, of the audio data corresponding to each of the N video reading memories.

9. (AMENDED) The device as claimed in claim 8, [characterized in that it furthermore comprises] further comprising means [(107)] for initiating the transfer of video and audio data stored in said reading memory to a decoder of said data when the set of N video reading memories has been filled.

10. (AMENDED) The device as claimed in [one of claims 1 to 9] claim 1, [characterized in that] wherein the audio and video data are recorded in compressed form.

11. (AMENDED) A process for recording audio and video data in a digital television receiver, [characterized in that it comprises] comprising the steps of:

- demultiplexing audio and video packets relating to one and the same program;

- simultaneous accumulation of the demultiplexed video data in a first memory and of the demultiplexed audio data in a second memory;

- stopping the accumulation in said memories following the obtaining of a predetermined quantity of video data in said first memory;

- recording of the video data accumulated in said first memory and of the audio data accumulated in the second memory respectively in a first area of a block whose fixed size is equal to said predetermined quantity and in a second area of this block, the size of this second area being fixed and chosen in such a way that it is greater than or equal to the maximum quantity of audio data which can be accumulated while obtaining said predetermined quantity of video data.

12. (AMENDED) The process as claimed in claim 11, [characterized in that] wherein the ratio of the sizes of the first and second areas is such that it is greater than or equal to the maximum ratio of the bit rate of video data and of the bit rate of audio data in the digital stream.

13. (AMENDED) The process as claimed in [claim 11 or 12] claim 11, [characterized in that it furthermore comprises] further comprising the step of recording in each block of a data item indicating the quantity of audio data recorded in this block.

14. (AMENDED) The process as claimed in [one of claims 11 to 13] claim 11, [characterized in that] wherein the recorded audio and video data are elementary stream packets, with the exclusion of information emanating from the transport layer.

15. (AMENDED) An audio and video data recording device [(201)], [characterized in that] wherein it comprises a partition comprising a plurality of logic blocks organized in series and each comprising a first area of fixed size for the recording of video data, and a second area for the recording of audio data and of fixed size such that it is greater than or equal to the maximum quantity of audio data which can be accumulated while accumulating a predetermined quantity of video data, said predetermined quantity being equal to the size of said first area.